

**RED EMITTING PHOSPHOR AND CATHODE RAY TUBE MADE BY USING IT**

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**Abstract of JP3220286**

**PURPOSE:** To obtain a red emitting phosphor which gives clear-cut stripes and dots, is dense, and does not cause color mixing by forming a red emitting Y<sub>2</sub>O<sub>3</sub> phosphor having a specified means particle diameter, a specified ratio of a mean particle diameter to a 50% particle diameter in a cumulative slurry particle size distribution, and a specified distribution of volume of particles by the diameter.

**CONSTITUTION:** A red emitting phosphor having a mean particle diameter of 4-5μm and made of a matrix comprising yttrium oxysulfide, wherein the ratio of the 50% D of a cumulative slurry particle size distribution to the means particle diameter is 1.3 or less, and the volume (weight) of particles having a diameter of 8.01μm or larger is at most 10%. Examples of the phosphor to be used include an Eu-activated yttrium sulfide phosphor and a pigment-coated Eu-activated yttrium sulfide phosphor. This phosphor can give a fluorescent screen which provides clear-cut stripes and dots and does not cause color mixing; therefore, it can give a color cathode ray tube having a high-quality fluorescent screen.

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